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# **CENTER MOUNT UNIT COOLERS**

**Technical Guide** 

Models TLH | Air Defrost TLL | Electric Defrost

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We have made a commitment to customer needs, innovation and environmental stewardship and have dedicated ourselves to delivering energy-efficient choices. PSC and EC motors will reduce costs, improve the bottom line and enhance equipment performance and service life.

# Choose the most energy-efficient motor available for evaporators.



The EC motor is an Energy Solutions® option on new Chandler Center Mount evaporators. Available on all new equipment or as an easy-to-install, drop-in replacement aftermarket part from InterLink™ Commercial Refrigeration Parts. Because they're a drop-in replacement for existing shaded pole and PSC motors, installation is quick and easy. It's a **high impact**, **quick payback solution** for reducing costs and achieving green initiatives **without replacing the entire system**.

EC motors by InterLink are **up to 75% efficient** - that's a **51-59% increase over shaded pole motors** and a **30-35% increase over permanent-split capacitor (PSC) motors**. With all of this added efficiency, you can count on more **energy savings and lower operational costs** while taking a step in the right direction toward conserving our planet's resources.

To learn more about EC motors, visit www.interlinkparts.com/ec.

# **Nomenclature**

TLH	052	A	E
Model Series	Capacity	Electrical Code	<b>Design Revision</b>
TLH = Chandler Center Mount, air defrost TLL = Chandler Center Mount, electric defrost	# BTUH x 100	A = 115/1/60 B = 208-230/1/60 AE = 115/1/60 (EC) BE = 208-230/1/60 (EC)	



#### **Cabinet**

- · Air moves across the ceiling in both directions providing even air distribution throughout the cooler
- · Compact, ceiling mount and center mount design allows for shelving and storage of product around all walls
- Heavy-gauge grained aluminum cabinet cleans easily and looks attractive
- Stainless steel screws prevent rust streaks
- Panels on ends quickly remove for complete access to refrigerant components and electrical terminal block during installation and servicing
- · Quick disconnect, waterproof plug and receptacle for each motor in all models
- Wire fan guards with PVC coating for durability

#### Coil

- High-efficiency aluminum fins with full collars cover mechanically expanded copper tubes
- Coils are dehydrated and sealed at the factory
- · Highest quality tubular heaters provide fast and economical defrost
- Generous coil surface gives proper compressor balance
- Standard adjustable defrost termination fan delay thermostat

#### **Drain Pan**

- · Double drain pan eliminates drain pan sweating
- Tapered mounting provides proper slope for condensate drainage to one end of the unit

#### **Motors**

- · Motors are life lubricated and thermal overload protected
- EC motors (optional) available factory-installed or as a drop-in replacement through InterLink™ Commercial Refrigeration Parts in 115/1/60, 208-230/1/60 voltages
- PSC motors are optional for 115/1/60, 208-230/1/60 voltages
- PSC motors or EC motors are required for 50 Hz operation

#### **Options**

- Unit Configurations: mounted components, pre-assembled, pre-charged and Beacon II™
  - Units available with mounted TXV and mounted TXV / solenoid valve
  - Pre-assembled units come with mounted TXV, liquid line solenoid valve and room thermostat
  - Pre-charged units come with mounted TXV, liquid line solenoid valve, room thermostat and quick connect fittings
  - Mounted room thermostat
  - Beacon II units come with electronic expansion valves, pressure transducer, temperature sensors and Beacon control board
- Units available with stainless steel housing and drain pan
- Units available with copper fins. Air defrost units also available with polyester coated fins or various coil coatings options

All Chandler Center Mount units are UL-listed for US and Canada and meet NSF standards.

# **Performance Data**

### **Model TLH Air Defrost | 60 Hz**

		Capa	acity			Fan Data		
Model	10°F TD	6°C TD	15°F TD	8°C TD				
Model	25°F SST	-4°C SST	25°F SST	-4°C SST	No.	CFM	m³H	
	BTUH	Watts	BTUH Watts					
TLH052	5,200	1,520	7,800	2,280	1	610	1,035	
TLH076	7,600	2,230	11,400	3,340	2	1,300	2,210	
TLH090	9,000	2,640	13,500	3,950	2	1,260	2,140	
TLH102	10,200	2,990	15,300	4,480	2	1,220	2,075	
TLH108	10,800	3,160	16,200	4,750	3	1,950	3,315	
TLH134	13,400	3,920	20,100	5,890	3	1,890	3,210	
TLH156	15,600	4,570	23,400	6,850	3	1,830	3,110	
TLH179	17,900	5,240	26,850	7,860	4	2,520	4,285	
TLH208	20,800	6,100	31,200	9,140	4	2,440	4,145	
TLH249	24,900	7,290	37,350	10,940	5	3,050	5,185	

# **Model TLH Air Defrost | 50 Hz**<sup>†</sup>

Nodel Izil/ili Dellost   30 liz											
		Capa	acity		Fan Data						
Model	10°F TD	6°C TD	15°F TD	8°C TD							
Model	25°F SST	-4°C SST	25°F SST	-4°C SST	No.	CFM	m³H				
	BTUH	Watts	BTUH	Watts							
TLH052	4,950	1,450	7,410	2,170	1	550	935				
TLH076	7,220	2,110	9,880	2,890	2	1,170	1,990				
TLH090	8,550	2,500	12,830	3,760	2	1,135	1,930				
TLH102	9,690	2,840	14,540	4,260	2	1,100	1,865				
TLH108	10,260	3,000	15,390	4,510	3	1,755	2,985				
TLH134	12,730	3,730	17,420	5,100	3	1,700	2,890				
TLH156	14,820	4,340	22,230	6,510	3	1,650	2,800				
TLH179	17,010	7,980	23,290	6,820	4	2,270	3,855				
TLH208	19,760	5,790	29,640	8,680	4	2,200	3,735				
TLH249	23,660	6,930	32,400	9,490	5	2,745	4,665				

### **Model TLL Electric Defrost | 60 Hz**

		Fan Data						
Model	10°F TD	6°C TD	12°F TD	7°C TD				
Model	-20°F SST	-29°C SST	-20°F SST	-29°C SST	No.	CFM	m³H	
	BTUH	Watts	BTUH	Watts				
TLL040	4,000	1,170	4,800	1,410	1	610	1,037	
TLL054	5,400	1,580	6,480	1,900	2	1,300	2,210	
TLL065	6,500	1,900	7,800	2,280	2	1,260	2,142	
TLL090	9,000	2,640	10,800	3,160	3	1,950	3,315	
TLL130	13,000	3,810	15,600	4,570	3	1,830	3,111	
TLL174	17,400	5,100	20,880	6,120	4	2,440	4,148	

# **Model TLL Electric Defrost | 50 Hz**<sup>†</sup>

		Capa	acity		Fan Data						
Model	10°F TD	6°C TD	12°F TD	7°C TD							
Model	-20°F SST	-29°C SST	-20°F SST	-29°C SST	No.	CFM	m³H				
	BTUH	Watts	BTUH	Watts							
TLL040	3,800	1,110	4,560	1,335	1	550	993				
TLL054	5,130	1,500	6,160	1,890	2	1,170	1,989				
TLL065	6,180	1,810	7,410	2,170	2	1,135	1,928				
TLL090	8,550	2,500	10,260	3,000	3	1,755	2,983				
TLL130	12,350	3,620	14,820	4,340	3	1,650	2,800				
TLL174	16,530	4,840	19,840	5,810	4	2,200	3,733				

<sup>&</sup>lt;sup>†</sup> For EC motors, use 60 Hz capacity and airflow values (Units with EC motors operating at 50 Hz will not see a reduction in performance due to the electronic control of the motor)

# **Specifications**

# **Model TLH Air Defrost | 60 Hz**

			Shade	d Pole			PSC N	Motor		EC Motor			
Model	HP	115/1/60		208-23	0/1/60	115/	1/60	208-23	0/1/60	115/	1/60	208-23	0/1/60
		Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
TLH052	1/15	2.1	135	1.1	135	0.9	90	0.5	90	0.9	55	0.5	55
TLH076	1/15	4.2	270	2.2	270	1.8	180	1.0	180	1.8	110	1.0	110
TLH090	1/15	4.2	270	2.2	270	1.8	180	1.0	180	1.8	110	1.0	110
TLH102	1/15	4.2	270	2.2	270	1.8	180	1.0	180	1.8	110	1.0	110
TLH108	1/15	6.3	405	3.3	405	2.7	270	1.5	270	2.7	165	1.5	165
TLH134	1/15	6.3	405	3.3	405	2.7	270	1.5	270	2.7	165	1.5	165
TLH156	1/15	6.3	405	3.3	405	2.7	270	1.5	270	2.7	165	1.5	165
TLH179	1/15	8.4	540	4.4	540	3.6	360	2.0	360	3.6	220	2.0	220
TLH208	1/15	8.4	540	4.4	540	3.6	360	2.0	360	3.6	220	2.0	220
TLH249	1/15	10.5	675	5.5	675	4.5	450	2.5	450	4.5	275	2.5	275

# **Model TLH Air Defrost | 50 Hz**

			PSC I	Motor		EC Motor				
Model	HP [	110/	1/50	220/1/50		110/	1/50	220/1/50		
		Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	
TLH052	1/15	0.8	80	0.4	80	0.9	55	0.5	55	
TLH076	1/15	1.7	160	0.8	160	1.8	110	1.0	110	
TLH090	1/15	1.7	160	0.8	160	1.8	110	1.0	110	
TLH102	1/15	2.5	240	1.2	240	1.8	110	1.0	110	
TLH108	1/15	2.5	240	1.2	240	2.7	165	1.5	165	
TLH134	1/15	2.5	240	1.2	240	2.7	165	1.5	165	
TLH156	1/15	3.3	320	1.6	320	2.7	165	1.5	165	
TLH179	1/15	3.3	320	1.6	320	3.6	220	2.0	220	
TLH208	1/15	3.3	320	1.6	320	3.6	220	2.0	220	
TLH249	1/15	4.2	400	2.0	400	4.5	275	2.5	275	

# **Model TLL Electric Defrost | 60 Hz**

		Shaded Pole Motor PSC Motor EC Moto		lotor	Heaters			
Model	HP	208-23	0/1/60	208-23	0/1/60	208-23	30/1/60	208-230/1/60
		Amps	Watts	Amps	Watts	Amps	Watts	Watts
TLL040	1/15	1.1	135	0.5	90	0.5	55	5.3
TLL054	1/15	2.2	270	1.0	180	1.0	110	8.7
TLL065	1/15	2.2	270	1.0	180	1.0	110	8.7
TLL090	1/15	3.3	405	1.5	270	1.5	165	10.5
TLL130	1/15	3.3	405	1.5	270	1.5	165	15.7
TLL174	1/15	4.4	540	2.0	360	2.0	220	20.9

# **Model TLL Electric Defrost | 50 Hz**

Model HP			Motor 1/50		lotor 1/50	Heaters 220/1/50
		Amps	Watts	Amps	Watts	Watts
TLL040	1/15	0.4	80	0.5	55	5.3
TLL054	1/15	0.8	160	1.0	110	8.7
TLL065	1/15	0.8	160	1.0	110	8.7
TLL090	1/15	1.2	240	1.5	165	10.5
TLL130	1/15	1.2	240	1.5	165	15.7
TLL174	1/15	1.6	320	2.0	220	20.9

NOTE: Shaded pole motors are standard for all 60 Hz units and PSC motors are standard for all 50 Hz units

# **Physical Data**

### **Model TLH Air Defrost**

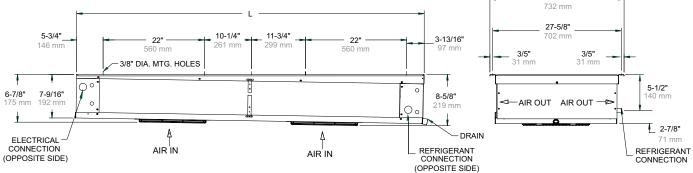
	No.	Connect	ions (in.)	Approx.	Net Wt.
Model	of Fans	Inlet OD	Suction OD	lbs.	kg
TLH052	1	1/2	7/8	42	19
TLH076	2	1/2	7/8	64	29
TLH090	2	1/2	7/8	70	32
TLH102	3	1/2	7/8	83	38
TLH108	3	1/2	7/8	105	48
TLH134	3	1/2	7/8	117	53
TLH156	4	1/2	7/8	123	56
TLH179	4	1/2	7/8	149	68
TLH208	4	1/2	1-1/8	164	74
TLH249	5	1/2	1-1/8	206	94

### **Model TLL Electric Defrost**

	No.	Connect	ions (in.)	Approx. Net Wt.		
Model	of Fans	Inlet OD Suction OD		lbs.	kg	
TLL040	1	1/2	7/8	90	41	
TLL054	2	1/2	7/8	120	54	
TLL065	2	1/2	7/8	120	54	
TLL090	3	1/2	7/8	160	73	
TLL130	3	1/2	7/8	174	79	
TLL174	4	1/2	1-1/8	218	99	

28-13/16"\_

# **Dimensional Data**



NOTE: All units have 1/4" OD external equalizer and 3/4" FPT drain connection

### **Model TLH Air Defrost**

	No.	Dimensions		
Model	of Fans	L		
		in.	mm	
TLH052	1	31-1/2	800	
TLH076	2	53-1/2	1,359	
TLH090	2	53-1/2	1,359	
TLH102	3	53-1/2	1,359	
TLH108	3	75-1/2	1,918	
TLH134	3	75-1/2	1,918	
TLH156	4	75-1/2	1,918	
TLH179	4	97-1/2	2,477	
TLH208	4	97-1/2	2,477	
TLH249	5	119-1/2	3,035	

### **Model TLL Electric Defrost**

	No.	Dimensions			
Model	of Fans	L			
		in.	mm		
TLL040	1	31-1/2	800		
TLL054	2	53-1/2	1,359		
TLL065	2	53-1/2	1,359		
TLL090	3	75-1/2	1,918		
TLL130	3	75-1/2	1,918		
TLL174	4	97-1/2	2,477		

# **Replacement Parts**



#### Right source. Right parts. Right now.

InterLink™ is your link to a complete line of dependable and certified commercial refrigeration parts, accessories and innovative electronic controls for all Chandler equipment. At InterLink, we provide our wholesalers with a comprehensive selection of product solutions and innovative technologies for the installed customer base. And every product is built to ensure the same high performance standards with which all Heatcraft Refrigeration Products (HRP) brands are built — backed by a dedicated team to serve every customer need, delivering at the best lead times in the industry.

#### Dependable. Versatile. Courteous.

Finally, one simple source for all your replacement needs from a name you can trust.

For parts, please contact (800) 686-7278 or visit www.interlinkparts.com.

#### **Motor/Fan Blade/Fan Guards**

Part #	Description	No. Fans
5036SS	Motor 115/1/60 Shaded Pole	1 - 5
5036TS	Motor 208-230/1/60 Shaded Pole	1 - 5
5036NS	Motor 115/1/60/50 PSC	1 - 5
5036PS	Motor 208-230/1/60/50 PSC	1 - 5
25305901	Motor 460/1/60	1 - 5
25317901	Motor 208-230/1/60 EC	1 - 5
25318001	Motor 115/1/60 EC	1 - 5
5110E	Fan Blade	1 - 5
5055F	Fan Guard - Wire	1 - 5
40003001	Motor Mount Plate	1 - 5

#### **Cabinet Components**

Part #	Description	No. Fans
C26363A2	Drain Pan - Stucco	1
C26360A2	Drain Pan - Stucco	2
C26361A2	Drain Pan - Stucco	3
C26362A2	Drain Pan - Stucco	4
40820301	Drain Pan - Stucco	5
40820601	Drain Pan - White	1
40820701	Drain Pan - White	2
C26361A4	Drain Pan - White	3
C26362A4	Drain Pan - White	4
D20817A4	Drain Pan - White	5

### **Electrical Components**

Part #	Description
22512601	Terminal Board
4267W	Defrost Termination / Fan Delay Thermostat
4550G	Filter (optional one per fan)

#### **Electric Defrost**

Part #	Description	Model	No. Fans
4400S	Coil Heater	040	1
44015	Coil Heater	054, 065	2
4402S	Coil Heater	090	3
4403S	Coil Heater	130	3
44045	Coil Heater	174	4

### **Standard Nozzle Selection**

### **Model TLH Air Defrost**

Model	No. of	Distributor Tube (in.)		No. of	D 4045	Daa
	Fans	OD	Length	Circuits	R-404A	R22
TLH052	1	3/16	18	2	L-1/2	L-1/4
TLH076	2	3/16	18	2	L-3/4	L-1/3
TLH090	2	3/16	18	4	L-3/4	L-1/2
TLH102	3	3/16	18	4	L-1	L-1/2
TLH108	3	3/16	18	4	L-1	L-1/2
TLH134	3	3/16	18	4	L-1-1/2	L-3/4
TLH156	4	3/16	18	6	L-1-1/2	L-3/4
TLH179	4	3/16	18	6	L-2	L-3/4
TLH208	4	3/16	18	6	L-2	L-1
TLH249	5	3/16	18	6	L-2-1/2	L-1

### **Model TLL Electric Defrost**

Model	No. of	Distributor Tube (in.)		No. of	D 404A	R22
Model	Fans	OD	Length	Circuits	R-404A	K22
TLL040	1	3/16	18	2	L-1/2	L-1/4
TLL054	2	3/16	18	2	L-3/4	L-1/3
TLL065	2	3/16	18	4	L-3/4	L-1/2
TLL090	3	3/16	18	4	L-1	L-3/4
TLL130	3	3/16	18	6	L-1-1/2	L-1
TLL174	4	3/16	18	6	L-2	L-1-1/2

For more information on Chandler refrigeration products, contact your Sales Representative or visit us at www.chandlerref.com.



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Since product improvement is a continuing effort, we reserve the right to make changes in specifications without notice.

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